AI TONG SCHOOL

2012

SEMESTRAL ASSESSMENT 1

PRIMARY 4

MATHEMATICS

DURATION : 1 H 45 MIN

DATE: 14 May 2012

INSTRUCTIONS

Do not open the booklet until you are told to do so.
Follow all instructions.
Answer all questions.

Name : _____( )

Class : Primary 4_____ Marks: /100

Parent's Signature
Date

Section A

Questions 1 to 14 carry 2 marks each. For each question, four options are given. One of them is the correct answer. Make your choice (1, 2, 3 or 4). Shade the oval (1, 2, 3 or 4) on the Optical Answer Sheet with a 2B pencil. (28 marks)

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1 In 10 296, what is the value of the digit 2?

(1) 20

(2) 200

(3) 2000

(4) 20 000

2 Which of the following numbers is 15 010 when rounded off to the nearest 10?

(1) 15 106

(2) 15 016

(3) 15 014

(4) 15 004

3 Complete the number pattern.

23 114 , 22 614 , 22114 , _____ , 21 114

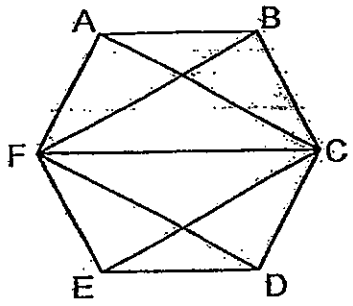
(1) 21 314

(2) 21 414

(3) 21 514

(4) 21 614

4 In the figure, which line is perpendicular to CD?



(1) AF

(2) ED

(3) FD

(4) FC

5 When a number is divided by 8, the quotient is 184. What is this number?

(1) 13

(2) 23

(3) 872

(4) 1472

6 54 is not a multiple of _____.

(1) 9

(2) 6

(3) 3

(4) 4

7 There were 298 passengers who boarded the cable car to Sentosa in the morning. Each cabin could carry 6 passengers. What is the least number of cabins needed to carry all the passengers?

(1) 48

(2) 49

(3) 50

(4) 51

8 Express $3\frac{4}{12}$ in its simplest form.

(1) $\frac{1}{3}$

(2) $\frac{40}{12}$

(3) $3\frac{1}{3}$

(4) $3\frac{2}{6}$

9 Johan has 40 marbles. He gave $\frac{4}{5}$ of it to his cousin. How many marbles had he left?

(1) 8

(2) 10

(3) 32

(4) 50

10 Mr Cheng finished polishing and waxing his car at 1.25 p m.. He took $1\frac{1}{10}$ h to wash and $2\frac{1}{4}$ h to polish. What time did he start?

(1) 10.00 a.m.

(2) 10.04 a.m.

(3) 10.14 a.m.

(4) 10.46 a.m.

11 What is the sum of $\frac{1}{5}$ and $3\frac{1}{2}$ in the simplest form?

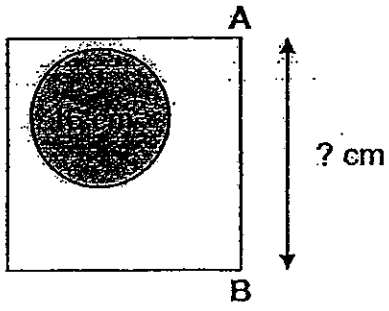
(1) $\frac{7}{10}$

(2) $3\frac{2}{7}$

(3) $3\frac{4}{5}$

(4) $3\frac{7}{10}$

12 The figure below is made up of a square and a circle. The area of the shaded circle is 16 cm^2. Given that the area of the square is 4 times the area of the circle. What is the length of AB?



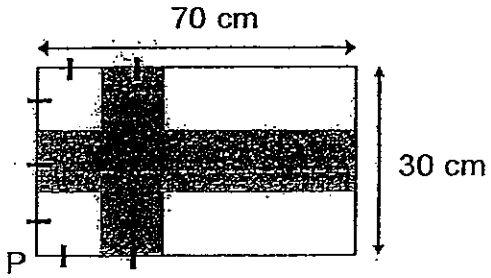
(1) 64 cm

(2) 16 cm

(3) 8 cm

(4) 4 cm

13 Look at the composite figure below. What is the perimeter of the shaded figure?

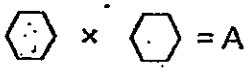


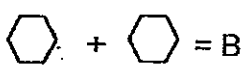
(1) 100 cm

(2) 200 cm

(3) 360 cm

(4) 900 cm

14  = A

 = B

If A is a multiple of B, what is the possible value of  ?

(1) 1

(2) 2

(3) 3

(4) 5

Section B

Questions 15 to 34 carry 2 marks each. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated.

(40 marks)

15 Write forty-three thousands and fourteen tens in figures.

Ans: _____

16 Find the value of 2001 – 549.

Ans: _____

17 A number between 6 and 11 is a multiple of 4. What is the number?

Ans: _____

18 Form the smallest five-digit **even** number using all the digits below.

0, 7, 8, 2, 5

Ans: _____

19 Which two of the fractions below are equivalent to $\frac{6}{8}$?

$\frac{3}{4}$, $\frac{4}{6}$, $\frac{10}{12}$, $\frac{12}{16}$

Ans: _____ and _____

20 $1459 \times 9 =$ _____

Ans: _____

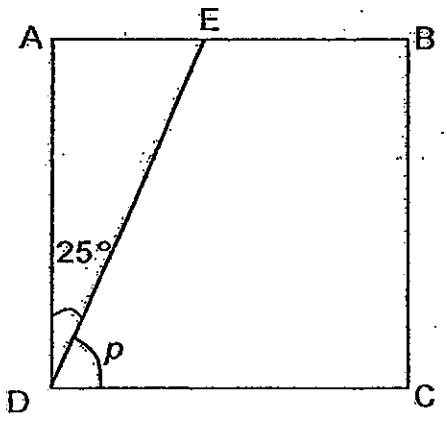
21 What is the remainder when 1145 is divided by 3?

Ans: _____

22 Write $\frac{57}{9}$ as a mixed number in its simplest form.

Ans: _____

23 In the figure below, ABCD is a square. $\angle ADE = 25°$. Find the value of $\angle p$.



Ans: _____ °

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24 In a car park, there are 35 cars and motorbikes. If there are 120 wheels altogether, how many cars are there?

Ans: _____

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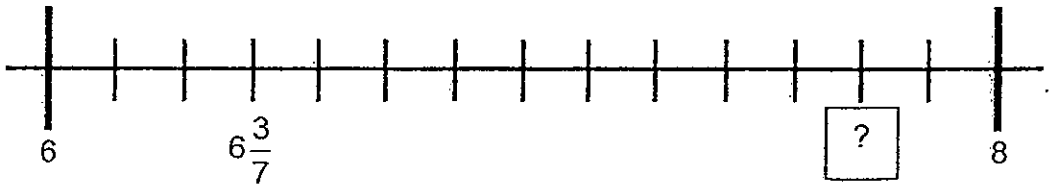
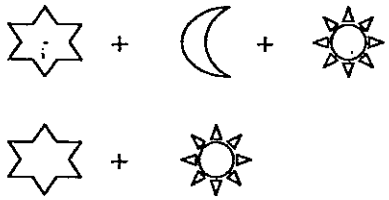
25 What is the missing mixed number in the box?

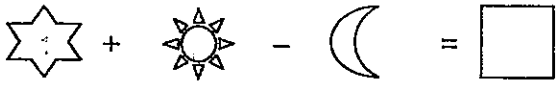


Ans: _____

26



What is the missing number in the box?



Ans: _____

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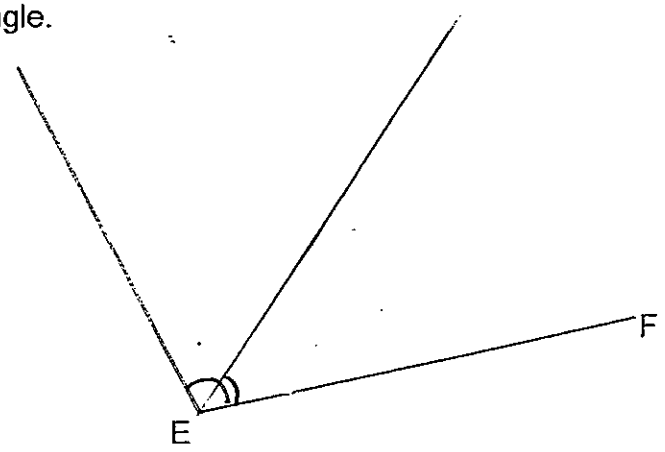
27 Using a protractor and pencil, construct an angle such that ∠DEF = 110°.
Mark and label the angle.



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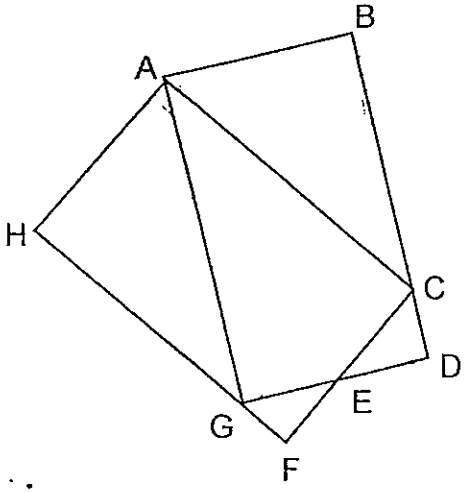
28 How many pairs of perpendicular lines are there in the diagram shown below?

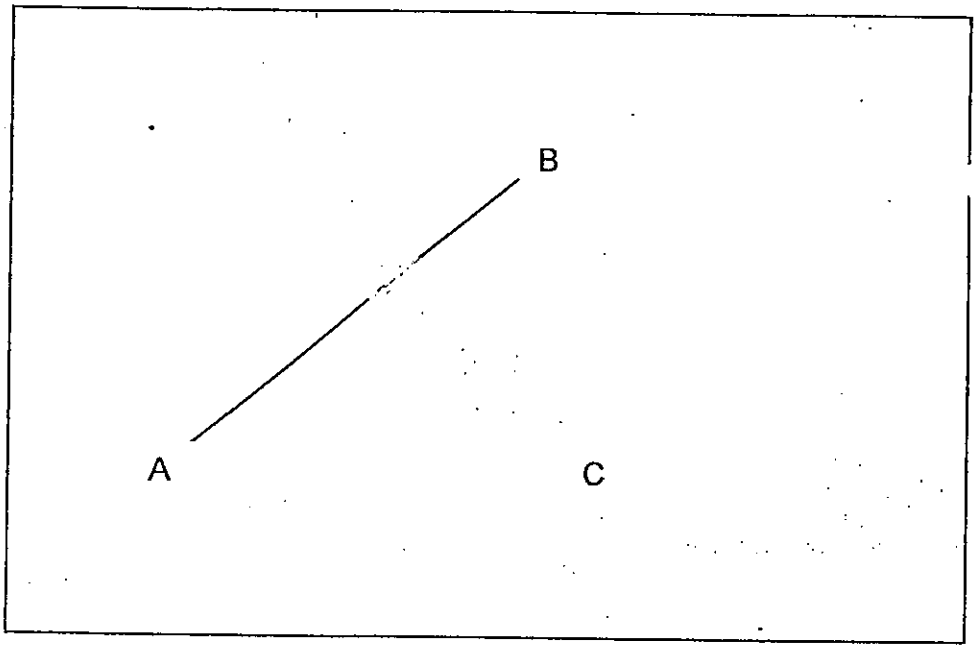


Ans: _____

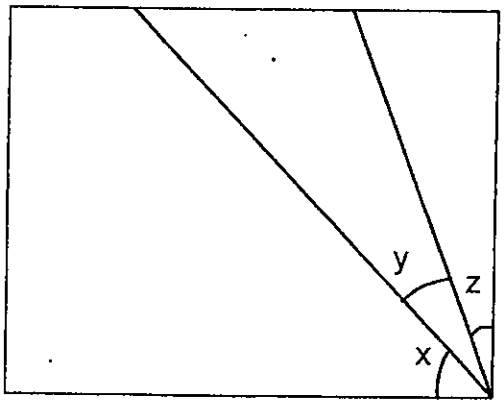
83

6

29 Draw a line perpendicular to the line AB passing through point C within the box and label it CD.

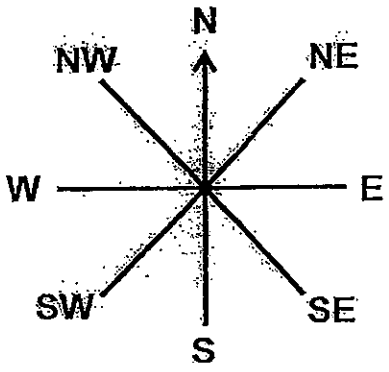


30 The figure, not drawn to scale, shows a rectangle. If $\angle$ y is 25° and the size of $\angle$ x is twice the size of $\angle$ y, find the size of $\angle$ z.



Ans: _____ ____°

31 Jasmine is standing in the middle of the 8-point compass facing North-West. Where will she be facing if she makes a $\frac{3}{4}$ - turn clockwise?



Ans: _____

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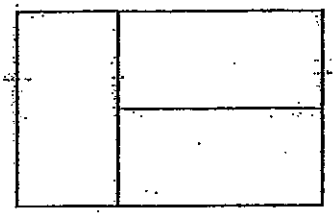
32 The perimeter of a rectangle is 34 cm. If the breadth is 8 cm, find its area.

Ans: _____ cm^2

4

33 The figure below, not drawn to scale, is made up of 3 identical rectangles. The total area is 54 cm^2. The breadth of each rectangle is 3 cm. What is the perimeter of the figure?



Ans: _____ cm

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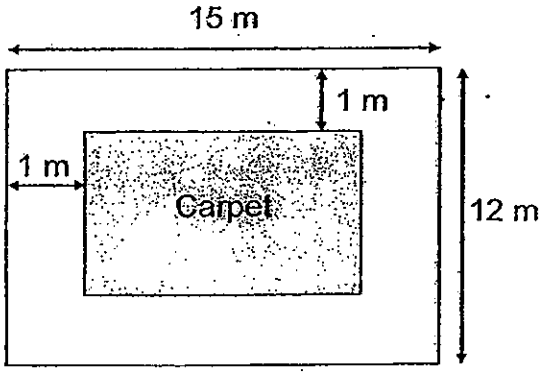
34 The floor of a rectangular room is 15 m by 12 m. What is the area of the carpet if there is a border of 1 m around it?



Ans: _____ m^2

Section C

Questions 35 to 38 carry 3 marks each. Questions 39 to 43 carry 4 marks each. Show your working clearly in the space provided below each question and write your answers in the spaces provided. (32 marks)

35 $6427 was shared among Paul, Tom and Dick. Paul received $235 less than Tom and Dick received the same amount as Paul. How much money did Tom receive?

Ans: _____ [3]

36 Sammy has thrice as many biscuits as Meilin. The total number of Sammy's and Meilin's biscuits is twice that of Amy's. The three of them have a total of 210 biscuits. How many more biscuits does Sammy have than Meilin?

Ans: _____ [3]

37. The perimeter of a rectangle is twice the perimeter of a square. The length of the square is 7 cm and the breadth of the rectangle is 9 cm. What is the area of the rectangle?

Ans: _____ [3]

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38 Bala enjoys eating chocolate. Each day, he would eat 2 more chocolate than the previous day. If he ate a total of 27 chocolate in 3 days, how many of such chocolates did he start with on the first day?

Ans: _____ [3]

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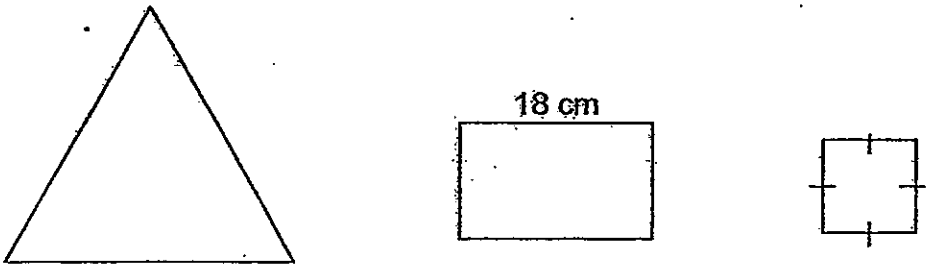
39 A piece of wire, 144 cm long, is cut into two equal pieces, A and B. Wire A is bent to form a triangle. Wire B is cut into two pieces again and used to form a rectangle and a square as shown in the figure below.



The perimeter of the triangle is 3 times the perimeter of the square. Find the breadth of the rectangle.

Ans : _____ [4]

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40 At a party, $\frac{3}{7}$ of the people attending were adults. $\frac{2}{5}$ of the children were boys. If there were 48 girls, how many people were there at the party?

Ans : _____ [4]

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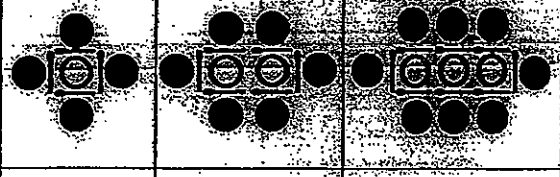
41 Lydia makes patterns using black and white beads and match sticks as shown below.

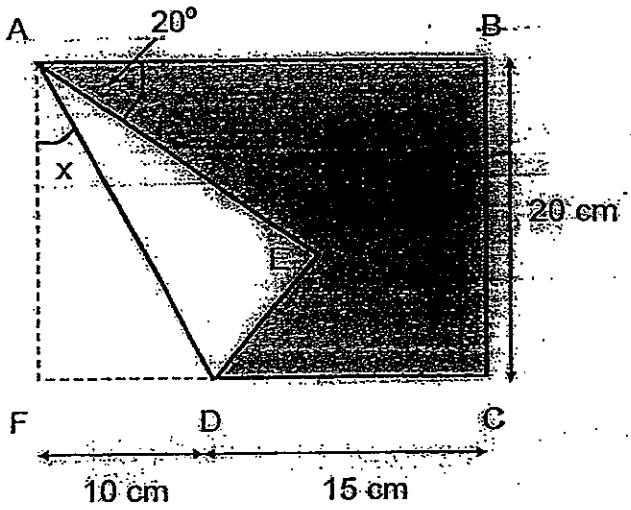
	Pattern 1	Pattern 2	Pattern 3	...	Pattern 6	...	Pattern 305
							
White Beads	1	2	3		(a) (i) _____		
Black Beads	4	6	8				
Match sticks	4	6	8		(a) (ii) _____		?

(a) Complete the table. [2]

(b) How many matchsticks does she need to complete Pattern 305?

Ans: (b) _____ [2]

42



A rectangular sheet of paper ABCF is folded as shown in the figure ~~below.~~
The figure above is not drawn to scale.
Given that $\angle BAE = 20°$, BC = 20 cm, CD = 15 cm and DF = 10 cm,

a) find $\angle x$ and

b) the area of the shaded part.

Ans: (a) _____ [2]

(b) _____ [2]

43. Linda had 424 beads and Mary had 188 beads. After each of them gave away an equal number of beads, Linda had thrice as many beads left as Mary.

(a) How many beads did they have altogether?

(b) How many beads did Linda give away?

Ans: (a) _____ [1]

(b) _____ [3]

4

End-of-paper

Please check your work carefully.

ANSWER SHEET

EXAM PAPER 2012

SCHOOL : AITONG
SUBJECT : PRIMARY 4 MATHEMATICS

TERM : SA1

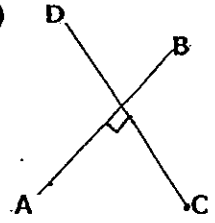
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14
2	3	4	3	4	4	3	3	1	2	4	3	2	2

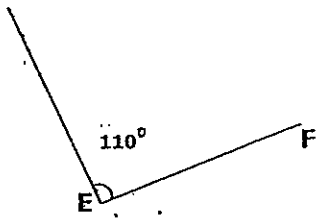
15)43140 **16)1452** **17)8** **18)20578** **19) ¾ and 12/6**

20)13131 **21)2** **22)6 1/3** **23)65°** **24)25**

25)7 5/7 **26)2** **27)** **28)8**

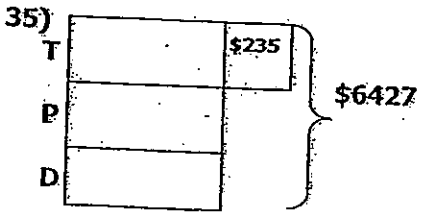
29)





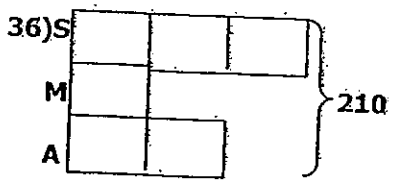
30)15° **31)South-West** **32)72cm2** **33)30cm** **34)130m2**

35)



$6427 – $235 = $6192
$6192 ÷ 3 = $2064
$2064 + 235 = $2299

36)



210 ÷ 6 = 35
1unit = 35 biscuits
35 x 3 = 105
105 – 35 = 70

37)28 x 2 =56
56 – 18 = 38
38 ÷ 2 = 19
19 x 9 = 171cm$_2$

38)5 + 7 + 9
6 + 8 + 10
7 + 9 + 11
Ans: 7

39)144 ÷ 3 = 48
18 + 18 = 33
48 – 36 = 12
12 ÷ 2 = 6

40)3/5-------Girls
48 ÷ 3 = 16
16 x 5 = 80 (no.of children)
1 – 3/7 = 4/7 (fraction of children)
80 ÷ 4 = 20
20 x 7 = 140

41)a)i)6 ii)14

b)305 x 2 = 610

610 + 2 = 612

42)a)90 – 20 = 70

70÷2 = 35

b)Area of ABCF = 20 x 25 = 500

area of △A = D + area of △ADE

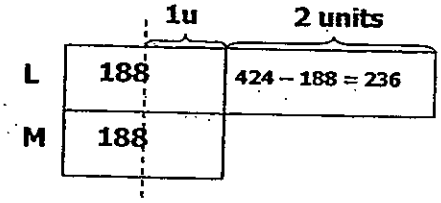
= area of rectangle

= 10 x 20 = 200

Area of shaded part = 500 – 200 = 300

43)a)424 + 188 = 612

b)



236÷2 = 118 (1unit)

118 – 118 = 70